

May 10, 1948

Prof. Joshua Lederberg  
Department of Genetics  
University of Wisconsin  
Madison, Wisconsin

Dear Prof. Lederberg:

I would like to thank you very much for your letter of April 26.

I would indeed be very much interested in directing my graduate work toward the study of the genetics of micro-organisms. In addition to the general fascination of this new field, I have had some opportunity to look into some of the recent literature in connection with my problem on starch formation by pyrenoids in certain algae. I have obtained a positive Feulgen reaction on pyrenoids of *Spirogyra*, which, if it can be repeated, would indicate a concentration of nucleo-proteins in a strictly cytoplasmic body. From morphological and microchemical study of living and fixed material, it is suggested that a "pyrenoid complex" is a seat of enzymatic activity in starch formation, in the algae studied.

I am writing about this because I realize that the really essential part of such a study is not the morphological, but the biochemical analysis. For the latter, however, I must admit that my background and training is not very thorough. Thus I wonder whether you would consider me sufficiently qualified for an aspect of genetic research, which I imagine would require considerable background in biochemical technique.

If you should consider me qualified for the position, I would certainly be very interested in the research assistantship mentioned in your letter.

Enclosed please find transcripts of my University record as well as recent photograph. I might add that currently I am taking an advanced plant physiology course, which has helped me to get some insight into the biochemical aspects of Botany. Thanking you for your consideration, I remain,

Sincerely yours,

*Karl M. Jakob.*

Karl M. Jakob

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